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**Attention: EXAMINER WILLIAM L. OEN**  
**Phone: (571) 272-2186**

TC 2800 PERSONNEL: THE DOCUMENT TO FOLLOW IS A

## **RESPONSE AFTER FINAL**

including:

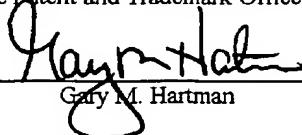
- Response under 37 CFR §1.116
- Notice of Appeal
- Appeal Brief under 37 CFR §41.37 (filed in triplicate)
- Reply Brief under 37 CFR §41.41 (filed in triplicate)
- Request for Continued Examination (RCE) Transmittal
- Other: \_\_\_\_\_

for filing in U.S. Patent Application Serial No. 10/054,331

## **SPECIAL STATUS**

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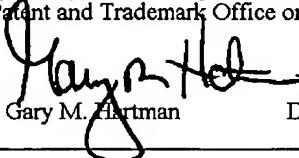
February 9, 2005  
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Date: February 9, 2005

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No. :	10/054,331	Confirmation No. 4772
Applicant :	Collin A. Rich et al.	
Filed:	January 22, 2002	
TC/Art Unit:	2855	
Examiner :	William L. Oen	
Docket No. :	10989-006 (A4-1763)	
Customer No. :	27127	

Commissioner for Patents  
P.O. Box 1450  
Alexandria VA 22313-1450

**REPLY UNDER 37 CFR §1.116**

This paper is being filed in response to an Office Action dated December 9, 2004 (Paper No. 20041207).

In the Office Action, the Examiner reviewed claims 1 and 3-36 of the above-identified US Patent Application, with the result that all of the claims were again rejected under 35 USC §103 in view of the same combination of references applied in the previous Office Action (Paper No. 20040722), namely, as being unpatentable over either U.S. Patent No. 6,068,589 to Neukermans, U.S. Patent No. 5,531,787 to Lesinski

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et al. (Lesinski '787), or U.S. Patent No. 5,984,859 to Lesinski (Lesinski '859) in view of U.S. Patent No. 5,509,280 to Zavracky. Applicants request reconsideration and allowance of claims 1 and 3-36 in view of the following remarks.

**Incomplete Office Action; Traversal of Final Rejection**

Applicants note that the present Office Action does not acknowledge or rebut Applicants' arguments presented in their immediately preceding Amendment filed October 28, 2004, concerning differences between the applied prior art and the invention recited in the claims as amended by the preceding Amendment. Such an omission is contrary to MPEP 706.07<sup>1</sup> and 707.07(f)<sup>2</sup>. In particular, the explanation given for maintaining the §103 rejection in the present Office Action is essentially verbatim to the grounds stated in the previous Office Action, and the present Office Action lacks a "Response to Arguments" that sets forth the Examiner's reasoning as to why Applicants' amendments and arguments were not effective to overcome the §103 rejection. Therefore, the present Office Action does not "answer the substance" of Applicants' arguments filed in their previous Amendment.

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<sup>1</sup> "[T]he final rejection . . . should include a rebuttal of any arguments raised in the applicant's reply."

<sup>2</sup> "Where the applicant traverses any rejection, the examiner should, if he or she repeats the rejection, take note of the applicant's argument and answer the substance of it."

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In view of the above, Applicants respectfully request withdrawal of the finality of the Office Action, which would provide both the Examiner and Applicants an opportunity to clarify the issues, as would be necessary for Applicants to consider the prospects of an appeal.

**Rejection under 35 USC §103**

Applicants respectfully request reconsideration of the §103 rejection in view of the following comments.

Applicants' invention is directed to an implantable microfabricated sensing device capable of being entirely implanted within a human body for measuring a physiologic parameter of the body. With reference to Figure 9, which shows one of several embodiments within the scope of claim 1, a sensing device (112) is represented as comprising a biocompatible monolithic structure (120,144) that includes a substrate (120), a sensor (118) integrally formed with the substrate (120) and responsive to the physiologic parameter, at least one conductive path (196) integrally formed with the substrate (120) and sensor (118), and active circuitry (140) in proximity to the sensor (118) and electrically connected to the sensor (118) by the conductive path (196).

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As previously noted, in repeating the §103 rejection the Examiner restated verbatim the same basis for applying the three primary references as was stated in the previous Office Action, namely:

Neukermans, Lesinski et al. '787, and Lesinski et al. '859 each explicitly teaches all of the essential features of the claimed implantable micro-fabricated sensor device including a substrate with a sensor integrally formed thereon, and in turn a conductive path formed on the substrate and sensor, as well as active circuitry close to and electrically connected to the sensor.

In repeating verbatim the explanation for the rejection, the Examiner has failed to explain how the three primary references disclose the additional limitations introduced through Applicants' immediately preceding Amendment (filed October 28, 2004). In particular, the Examiner has not set forth in what manner Neukermans, Lesinski '787, and Lesinski '859 are each deemed to disclose an "implantable microfabricated sensing device" that is:

- (a) "capable of being entirely implanted within a human body"; and
- (b) "compris[es] a biocompatible monolithic structure comprising" each of the following elements: a substrate, integrally microfabricated sensor, conductive path, and active circuitry.

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Applicants emphasized these differences between their claimed invention and the teachings of Neukermans, Lesinski '787, and Lesinski '859 in an argument found on page 19 of Applicants' immediately preceding Amendment, reproduced below for the convenience of the Examiner.

[T]he primary and secondary references do not teach or suggest Applicants' claimed sensing device (112), in which a substrate (120), integral sensor (118), conductive path (196), and active circuitry (140) are all portions of a biocompatible monolithic structure (120,144), and that the entire sensing device (112) is implantable within the human body. Instead, the primary references (Neukermans, Lesinski '787 and Lesinski '859) are all limited to implantable devices whose sensors (28) and their processing circuitry (30) are not part of the same monolithic structure. To the contrary, the sensors (28) and their circuitry (30) are completely discrete components that are placed separately and apart in the body and interconnected only with wires (33,34). Furthermore, the devices taught by the primary references have sensor portions that do not sense physiologic parameters of the human body - instead, the sensors (microphones 28) of these devices sense sound waves to which the body is subjected.  
(Original emphasis.)

As with the previous Office Action, the present Office Action merely applies the secondary reference (Zavracky) for teaching a cap layer and a capacitive-type sensor. Therefore, the Examiner has not argued that the secondary reference discloses or suggests combining a substrate, integrally microfabricated sensor, conductive path, and active circuitry as part of the same biocompatible monolithic structure.

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“The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness.” MPEP §2142. In the present Office Action, the Examiner has not established a case of *prima facie* obviousness, because doing so requires:

the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant’s disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

MPEP §2142.

Because the present Office Action does not factually support a *prima facie* conclusion of obviousness, Applicants are under no obligation to submit evidence or present arguments for nonobviousness. MPEP §2142. However, Applicants do not wish to miss this opportunity to reemphasize certain arguments raised on pages 20 and 21 of their immediately preceding Amendment, reproduced below for the convenience of the Examiner.

In view of the above, to arrive at Applicants’ invention one skilled in the art would be required to modify the teachings of the primary references beyond that taught or suggested by the secondary reference. However,

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The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the *prior art* suggested the desirability of the modification.  
(Emphasis added.)

*In re Fritch*, 23 USPQ2d 1780, 1783-1784 (Fed. Cir. 1992).

Furthermore, for the basis of a rejection under 35 USC §103, Applicants believe that it is very significant that the primary and secondary references are not concerned with the problem solved by Applicants - namely, a microfabricated sensing device that can be entirely implanted within a human body for actively measuring a physiological parameter within the human body. Absent recognition of the problems faced and solved by Applicants, Applicants believe that the prior art does not suggest the sensing device recited in Applicants' claims. *Eibel Process Co. v Minnesota and Ontario Paper Co.*, 261 US 45 (1923).

Finally, Applicants believe that the combination of prior art references cited in this rejection do not teach or suggest other claimed aspects of the invention. For example, the prior art does not teach or suggest: a displacement cavity in communication with an interior volume (claim 9), two conductive paths isolated by a p-n junction (claim 28), a housing that defines a form factor providing an external shape to the sensing device, e.g., round, that differs from the monolithic structure, e.g., rectilinear (claim 32), or that such a housing comprises a recess providing intimate access to the sensor (claim 35).

For all of the above reasons, Applicants respectfully request withdrawal of the rejection to the claims under 35 USC §103(a).

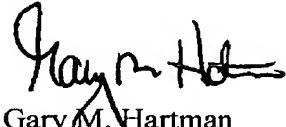
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**Closing**

In view of the above, Applicants respectfully request withdrawal of the finality of the rejection, and respectfully request reconsideration of the claim rejection based on the references of record.

Should the Examiner have any questions with respect to any matter now of record, Applicants' representative may be reached at (219) 462-4999.

Respectfully submitted,

By   
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February 9, 2005  
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